Sachse Amateur Radio Association

SARA SKYWAVES

W5SRA

November 2020

MY CORNER OF THE SHACK

By Greg Kent, KK6AXF

I thought I would take a moment to openly discuss recent events affecting our new W5SRA repeater. In the last few weeks, as the repeater team has continued to make progress on our repeater build, (continuing to add HamVoip, all-Starlink, and some other testing), we have started to experience quite a bit of repeater jamming. First, what is repeater jamming? There are many types of repeater jamming. Most if not all are illegal. One example would be a radio operator who **kerchunks** the repeater over and over again without IDing their transmission. Almost everyone may be guilty of this at one point or another, and while it's a nuisance, it's human nature to want to quickly key and have the peace of mind the repeater is out there.

A **packet jammer**, while not always intentional, is the use of a voice frequency or repeater to send data packets. The periodic **sound effects or recorded noise jammer** is usually someone who has it out for the operators or owners of a repeater. This offender is just trying to make the use of the repeater difficult or annoying to others. A worst case is a **rabid jammer**. This is a person who just wants to cause harm. They don't care who they are affecting or why. The more users effected the better for this offender. This jammer is the worst, but can be the easiest to catch.

What to do about a jammer? Never track down a jammer and confront them directly. This can put yourself at unnecessary risk for little gain. Only repeater owners can record, identify (if possible), and then report to local officials and the FCC. Depending on the offense, a repeater owner can also seek damages from the offender if able to prove damage or harm from the interference.

Our offender is someone who at first was just kerchunking or dead keying the repeater frequently till reaching the repeater timeout. This was being done at around the same time of the day almost every day. At first, the pattern seemed innocent. This person has continued to escalate their interference and lately has held down the repeater requiring us to deactivate the repeater until the interference was stopped. Rest assured, the club's repeater team is actively working to identify the culprit and will take appropriate steps to identify the offender, and report to the FCC and local authorities. Our club repeater is a hobbyist repeater, however, it belongs to a community of folks as a way for all of us to stay in touch during the current covid-19 situation as well as a tool in the event we have a local or regional emergency. The W5SRA repeater is available for use for emergency communications such as RACES/ARES or even ham members of Sachse CERT. I want to thank the team for their continued work in this matter and assure the club and others we will be using our fox hunting skills to identify the culprit.

73, KK6AXF – Greg Kent

Next General Meeting Thursday, November 12,

IN PERSON!!
Social Distancing will be observed.

7:30 PM at the
North Point Church
7030 Hwy 78, Sachse TX

JOIN US ON THE AIR

SARA Weekly Information Net
When: Weekly on Wednesdays, 8:00pm – 8:30pm
Where: N5LOC (145.250, PL 141.3)

The Sachse Amateur Radio Association uses the N5LOC repeater in Sachse, TX:

- Frequency: 145.25 MHz
- Shift: -600 kHz
- PL tone: 141.3

The W5SRA UHF Repeater is on the air.
440.350, +5, and 110.9 Tone in and out.

Upcoming Education Topics

November – Mike McCafferty - Coordinated Fox Hunt

December – Christmas Party

Do you shop at Amazon?

amazonsmile prime

Supporting: Sachse Amateur Radio Association

Support the Sachse Amateur Radio Association!

What is AmazonSmile?

AmazonSmile is a simple and automatic way for you to support your favorite charitable organization every time you shop, at no cost to you. When you shop at smile.amazon.com, you'll find the exact same low prices, vast selection and convenient shopping experience as Amazon.com, with the added bonus that Amazon will donate a portion of the purchase price to your favorite charitable organization. You can choose from over one million organizations to support.

How do I shop at AmazonSmile?

To support SARA, simply go to smile.amazon.com from the web browser on your computer or mobile device and setup the organization that you want to support. You may also want to add a bookmark to smile.amazon.com to make it even easier to return and start your shopping at AmazonSmile.

Need a new doormat?

UPCOMING EVENTS

Nov 12 - General Meeting

7:30 pm at the North Point Church, 7030 Hwy 78, in Sachse. We will be meeting in person and we will be observing social distancing guidelines. Mike N5MMC will be presenting on how to do a Coordinated Fox Hunt.

Nov 14 - VE Test Session

9:00 – 11:00am. Monthly on the second Saturday. 508 Parker Rd, Wylie, TX 75098. Contact: AC5BC (Bill) 214.500.3472, ac5bc2@verizon.net for additional details. While not required, scheduling with Bill in advance is appreciated!

Nov 24 – Board Meeting

The BOD meeting is being moved up to Tuesday this month and next month to accommodate Thanksgiving and Christmas Holidays.

Events for 2021

- Foxhunt on weekends? (Prizes?)
- Winter Field Day 1/30-31 2021
- Mentor Fest 4/24 2021
- Summer Field Day 6/26-27 2021
- Ham Radio in the Park (ideas needed)

Wednesday Repeater Net

N5LOC Repeater 145.250, Tone 141.3 @8:00 PM

4 Nov - Linda, K5LCS
11 Nov - Greg KK6AXF
18 Nov - Steve W5SOT
25 Nov - John, W5JWS

Sunday Public Service Net -

N5LOC Repeater 145.250, Tone 141.3 @9:00 PM

ARRL MEMBERS, Update your [Email Subscriptions] to receive the ARRL Current Monthly Email!

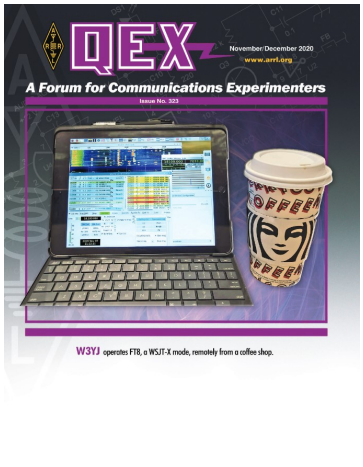
the ARRL CURRENT

Your monthly overview of ARRL publications and member benefits.

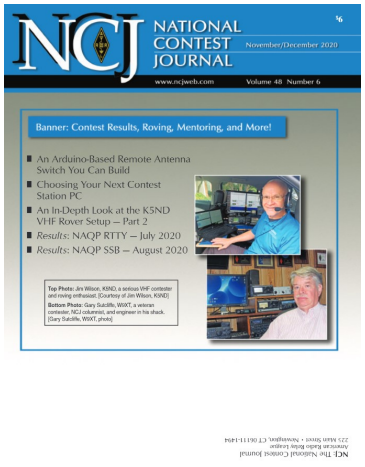
November QST

Sept/Oct OTA

Nov/Dec QEX


QEX
November/December 2020
A Forum for Communications Experimenters
W3YJ operates FT8, a WSJT-X mode, remotely from a coffee shop.

Nov/Dec NCJ


NCJ
NATIONAL CONTEST JOURNAL
November/December 2020
Banner: Contest Results, Roving, Mentoring, and More!
An Arduino-Based Remote Antenna Switch You Can Build
Choosing Your Next Contest Station PC
An In-Depth Look at the K5ND VHF Rover Setup — Part 2
Results: NAQP RTTY — July 2020
Results: NAQP SSB — August 2020

What's the Buzz

Eclectic Tech, Episode 20 – November 5

A chat with ARRL Emergency Preparedness Director Paul Gilbert, KE5ZW, about the future of amateur radio technology in public service. Also, a new power source using diamonds and nuclear waste.

Listen Now - *Eclectic Tech*

On the Air, Episode 10 – October 8

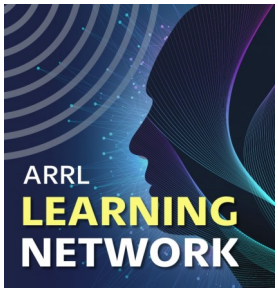
Guest host, Steve Ford, WB8IMY, introduces listeners to the ARR`L Learning Network. Learn how this member-driven webinar series is taking knowledge sharing to a new level with ARRL Lifelong Learning Manager Kris Bickell, K1BIC.

Listen Now - *On the Air*

ARRL Learning Network

Amateur radio has played a significant role in public service communications for the Boston Marathon for several decades. Learn more about the role Amateur Radio played in the aftermath of the Boston Marathon Bombing from Steve Schwarm, W3EVE

ARRL members can register for his upcoming webinar, "Amateur Radio's Role at the Boston Marathon Bombing " on Tuesday, December 8 at 12pm CST.



ARRL Urges Members to Join in Strongly Opposing FCC's Application Fees Proposal

ARRL will file comments in firm opposition to an FCC proposal to impose a $50 fee on amateur radio license and application fees. With the November 16 comment deadline fast approaching, ARRL urges members to add their voices to ARRL's by filing opposition comments of their own. The FCC *Notice of Proposed Rulemaking* (*NPRM*) MD Docket 20-270 appeared in the October 15 edition of *The Federal Register* and sets deadlines of November 16 to comment and November 30 to post reply comments, which are comments on comments already filed. ARRL has prepared a *Guide to Filing Comments with the FCC* which includes tips for preparing comments and step-by-step filing instructions. File comments on MD Docket 20-270 using the FCC's Electronic Comment Filing System (ECFS).

Under the proposal, amateur radio licensees would pay a $50 fee for each amateur radio application for new licenses, license renewals, upgrades to existing licenses, and vanity call sign requests. The FCC also has proposed a $50 fee to obtain a printed copy of a license. Excluded are applications for administrative updates, such as changes of address, and annual regulatory fees. Amateur Service licensees have been exempt from application fees for several years.

The FCC proposal is contained in a *Notice of Proposed Rulemaking* (*NPRM*) in MD Docket 20-270, which was adopted to implement portions of the "Repack Airwaves Yielding Better Access for Users of Modern Services Act" of 2018 — the so-called "Ray Baum's Act." The Act requires that the FCC switch from a Congressionally-mandated fee structure to a cost-based system of assessment. In its *NPRM*, the FCC proposed application fees for a broad range of services that use the FCC's Universal Licensing System (ULS), including the Amateur Radio Service. The 2018 statute excludes the Amateur Service from annual regulatory fees, but not from application fees. The FCC proposal affects all FCC services and does not single out amateur radio.

ARRL is encouraging members to file comments that stress amateur radio's contributions to the country and communities. ARRL's *Guide to Filing Comments* includes "talking points" that may be helpful in preparing comments. These stress amateur radio's role in volunteering communication support during disasters and emergencies, and inspiring students to pursue education and careers in engineering, radio technology, and communications.

As the FCC explained in its *NPRM*, Congress, through the Ray Baum's Act, is compelling regulatory agencies such as the FCC to recover from applicants the costs involved in filing and handling applications.

In its *NPRM* the FCC encouraged licensees to update their own information online without charge. Many, if not most, Amateur Service applications may be handled via the largely automated Universal License Service (ULS). The Ray Baum's Act does not exempt filing fees in the Amateur Radio Service, and the FCC stopped assessing fees for vanity call signs several years ago.

See also "FCC Proposes to Reinstate Amateur Radio Service Fees," reported by ARRL in August, and a summary page of the proceeding at www.arrl.org/FCC-Fees-Proposal.

Mistakes

CW, especially CW DX, is not a perfect art. Fading (QSB) and noise (QRM and QRN) create many circumstances where only partial transmissions are decipherable. The receiving operator is left to ask for a resend (by sending "?"). For the sake of brevity, some parts of the transmission may just get ignored and dropped.

The core of a CW QSO is a standard exchange of signal reports, names, and locations. Anything past that is considered to be "rag chewing". The information exchanged in a CW QSO is most often not critical to life or property. It's not the distress signal from the Titanic. Dropped characters or words are usually not that important.

For quite a while, I agonized over my inability to perfectly decipher Morse code. It's every new code operator's nightmare and embarrassment. As my code reading skills improved, I discovered something. Sometimes my inability to decipher the code stream wasn't my fault. It was the sender's fault. They were sending me gibberish.

A sense of humor about it all is a helpful part of CW operations. If you can't tolerate your fellow ham's foibles, your own day of reckoning is certainly coming.

I once joked that I could tell the age of the operator by how many cups of coffee it took for him or her to send good code. And, I could tell the age of their radio by how long it took for their transmitter frequency to stop drifting. J A lot of hams collect and run vintage radios, which can have many problems. Some of that equipment was marginally designed and was drifty or chirpy when it was new – and it's worse, now.

So, I encourage new CW ops to lighten up. Unfortunately there are a few grumpy CW ops out there who will criticize your lack of skills or knowledge. They need to get a life. If they don't encourage and support new CW ops (with all of a new op's mistakes), in 20 years there won't be any CW ops. All of their blather about how hams today aren't really hams because they didn't take a code test… or because they didn't take the exam in an FCC office… Really? Any new CW op is better than they are. We learn Morse code today because we want to. They learned Morse code because they had no other choice.

That being said, I do strive to improve my CW operating skills. Reading code isn't the only challenge. I'm constantly facing equipment challenges.

Yesterday I was at the park with the "go box", and I accidentally discovered where the annoying feedback in my radio was coming from. I was getting RF feedback through my headphone cable into the radio. Luckily there was a spare ferrite in my kit, and I quickly wound a few turns of the headphone wire around it. Problem solved! Expensive equipment should have input RF filtering on the audio lines that would eliminate this problem. I didn't have expensive equipment.

The major obstacle to becoming a CW op is embarrassment. Our on-air CW persona can be really sketchy at times. Can't read if the incoming code is too fast, and "too fast" starts out being 5 words per minute. Can't send decently until the coffee kicks in. People say that if you can't do something well, don't do it at all. Who wants to have the worst grade in the class?

In business I discovered that the startups that succeeded weren't the ones that didn't make mistakes. All startups make mistakes. The ones that succeeded made their mistakes quickly and inexpensively. As Alfred Korzybski once said, "the map is not the territory". Sometimes people agonize forever over the battle plan, only to discover that the plan was based on the map, and not the territory.

Put on your baggies and get out there. Surf's up.

Learn and Have Fun with Morse Code

Howard Bernstein, WB2UZE and Jim Crites, W6JIM

Morse code or "CW" is a popular ham radio operating mode.

Learning CW does not have to be an arduous or lonely experience. Learn, practice, and enjoy CW with the methods used by the Long Island CW Club.

Thursday, December 17, 2020, 5 PM PST / 8 PM EST (0100 UTC on Friday, December 18)

Register Now >

How Far Can QRP Go?

by Jim Eatman KG5WAW

The usual disclaimer here: I'm not offering engineering services or consulting. What I say below may be inaccurate or just plain wrong. I don't mean for it to be inaccurate or wrong, but people make mistakes. If you need an accurate analysis, hire a licensed professional engineer.

I have been having some pretty good luck with my 5 watt CW radio portable kit for the last few days. From local parks, my average QSO distance is about 1000 miles. This is with a simple, 3/8 wave wire vertical monopole/ sloper. How far could I really get with QRP? I ran some numbers, assuming the following:

5 watts power transmitted, 20 meters

1 uV needed at the receiving radio

¼ wave monopole antenna on each end

My calculations say that theoretically, the 5 W signal could travel 56,544 miles and still give me 1 uV on the receiving end. That's when the fun started. Obviously, my 5 W signal doesn't go 56,544 miles. It might go 1200 miles. After two years of operating portable CW QRP, my distance record is 1800 miles. The reason: system link losses. Take a look:

- Typical combined feedline, balun, and tuner loss (for any ham) on each end: 3 dB (x 2 for two ends = 6 dB)
- Average mispolarization loss: 3 dB for singularly polarized antennas (most antennas) when running HF DX

This is the mismatch between the polarization of your antenna, and the random polarization of an incoming signal

So far, we have added up 9 dB in average system link losses, which reduces our theoretical 56,544 miles to 6307 miles. Unfortunately, I don't get 6307 miles, either. Why? Ground clutter losses. Ionospheric efficiency losses.

Ionospheric efficiency losses can vary. I just know that I'm not getting two – 1000 mile hops out of my 5 watts on 20 meters right now. That could indicate an ionospheric loss of up to 9 dB. Perhaps, as the sunspot numbers increase this will improve. Late at night, on 40 meters, the situation is better. I'd guess that each ocean/ionosphere bounce combo loses 1 dB when using the gray line. It varies from day to day.

One thing to note is that mispolarization loss *averages* 3 dB. If the incoming signal is mispolarized by 90 degrees, the loss could be almost 100%. If you use a directional gain antenna (like a Yagi), if the incoming signal comes into the back side, that's another a loss of system gain, possibly severe.

This all assumes a link in the "sweet spot" of the antenna elevation angle. If a signal comes down on a vertical monopole antenna at a steep angle, the antenna gain is reduced.

There are several solutions here. The typical ham radio fix for everything is to increase power. To overcome the 9 dB hardware and average mispolarization losses, I'd have to increase my power by a factor of 8. That still doesn't solve the ionospheric efficiency problem. Hams usually work that problem by changing bands, trying to find a frequency that performs better – and by using gray line propagation.

Hardware losses we can reduce somewhat. Station transmit power we might be able to increase, but there are FCC, financial, safety, and other constraints. For HF DX, we usually have no control over polarization, since the signal twists in the Earth's magnetic field. Hams typically can't change the polarization of their antennas on the fly.

In the QRP world, increasing power isn't one of the options. QRPers have to work other angles. One of those angles is to run CW.

So, what's the limit of QRP? If there were no losses – a 5 watt transmission could go around the world twice and still be solid copy. It's like fishing. That 6 foot fish (between the eyes) is out there, somewhere.

I had this grand plan to get from Dallas to Australia at night on 40 meters using a 5 watt CW transceiver and a portable antenna. Here are some of the estimated losses in the link:

- 8 dB – ionospheric/ocean bounce losses (1 dB per hop x at least 8 hops). Varies.
- 6 dB - tuner, balun, and feedline losses (both ends)
- 4 dB(?) - mispolarization and elevation angle mismatch loss

My calculations show that with 5 watts and a 5 dB gain antenna, I can only stand 3 dB of system power loss and still have 1 uV of signal on the other end. I need to find 15 dB of gain somewhere. A horizontal beam on a 100 foot tower might give me 15 dB of gain...

An increase from 5 watts to 160 watts will certainly do the trick. But that option is out. You and I, we're both die-hard QRPers now! Lugging a 100 foot tower to the park – ain't gonna happen.

My experience with working Australia from the home shack using a vertical monopole is that even 100 watts is iffy. The assumptions in the calculations above assume a 1 uV signal level at the receiver, which would be between S3 and S4 on a typical S-meter. Whether that's good enough or not depends on the noise level. My home shack radio will cut down to a 50 Hz receive bandwidth if necessary, and it has DSP noise reduction. Those are big advantages when working with weak signals.

Unfortunately, my QRP portable rig has 500 Hz receive bandwidth, and no DSP noise reduction. That means I'd have to receive at least a 1 uV signal, maybe more. Aargh, as the pirate says.

You can't cut to 50 Hz bandwidth with SSB. With SSB, bandwidths less than 1000 Hz compromise intelligibility. A 1000 Hz bandwidth lets in twice the perceived noise of a 100 Hz filtered signal, after your logarithmic ear processes it.

Want to run DX with a 100 watt HF radio and a wire? *CW can get you halfway around the world.* Want 1000 miles with 5 watts? *CW is the ticket.* And unlike that tower, or linear amplifier - CW is free!

- Jim Eatman KG5WAW

SARA Club Officers for 2020-2021

Here are the newly elected officers for the Sachse Amateur Radio Association per the election held at the September General Meeting.

President	Greg Kent, KK6AXF
Vice President	John Smyder, W5JWS
Secretary	Johnnie Young, KG5CQO
Treasurer	David Mandala, KG5WFS
Public Information Officer	John Briggs, KC6TVF
Director at Large	Mark Mantooth, KI5CYA
Newsletter Editor	Steve Harbin, W5SOT

JOIN THE ARRL

As an ARRL member you support the ranks of thousands of other ham radio enthusiasts shaping the Amateur Radio service today. If you consider yourself an active ham... you need ARRL now. If you are not presently an active ham... let ARRL help you.

As a member of the ARRL, for as little as $49.00 per year, here are some of the benefits you will enjoy:

- *QST* Magazine – your monthly membership journal
- QST online monthly digital edition
- QST Archive and Periodical Search
- Product Review Archive
- Email forwarding
- E-Newsletters – delivered to your inbox
- A voice in the affairs of ARRL and ham radio through locally appointed volunteers
- Publication Specials and on-line course discounts
- Emergency Communication Services
- Technical and Regulatory Information Services
- Operating Awards
- Ham Radio Equipment Insurance Plan Available
- Outgoing Foreign QSL Service

Plus much more!

Take the next step in being an active participant in the future of ham radio. Join the ARRL today!

If you Prefer to Renew by Mail or Phone:

ARRL The national association for AMATEUR RADIO
225 Main Street, Newington, CT 06111-1400 USA
860-594-0200 or Toll-Free 1-888-277-5289

MODULAR ANTENNA PLATFORM v15 FOR RDF

By Mike McCafferty, N5MMC

[Editor's Note: To see Mike's RDF Platform in action, make sure to attend the November General Meeting!]

A modular platform, revision 15, for RDF makes for a comfortable and versatile RDF tool.

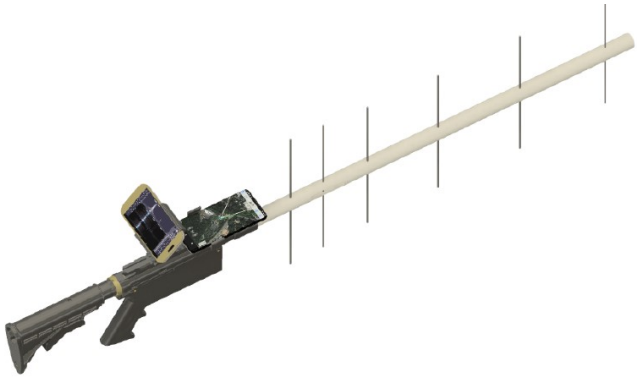


Figure 1: MAP15 System

The heart of the system contains an RTL-SDR software-defined radio module. These can be found for less than $30.

Figure 2: RTL-SDR USB device

An old Android-based tablet or phone that supports USB-OTG (On the Go) connects to the RTL-SDR and acts as the main display and runs the software for the SDR. Android software, such as SDR-Touch, is used as the radio receiver and optionally supports signal strength with spectrum analyzer and waterfall display. Listening can be done with the main speaker, headphones, or Bluetooth depending on the Android device. System power is supplied with the Android device's battery.

Figure 3: Android Phone with SDR Touch Application

Alternatively, if audio is not necessary, one could use a mini spectrum analyzer such as the tinySA. It also includes a battery and built-in 0 -31dB step attenuator.

https://www.tinysa.org/wiki/

Figure 4: tinySA Spectrum Analyzer

The antenna coupler, shown in figure 5, can be designed for many different antenna styles. It allows for quick attach/detach of the antenna to the MAP15 platform. It also has indexing that hold at various polarization angles.

Figure 5: Antenna Coupler Example

The SDR Touch application is a software radio receiver with spectrum analyzer and waterfall display for the RTL-SDR type USB devices. This is great for RDF because the signal strength and history can be monitored along with audio output.

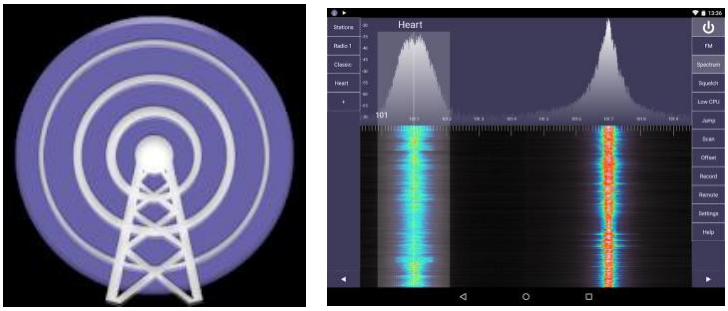


Figure 6: SDR Touch

Bearing information can be tracked using the Android's compass information using SigTrax. A second mount holds another Android phone in a flat, level position for capturing bearing information.

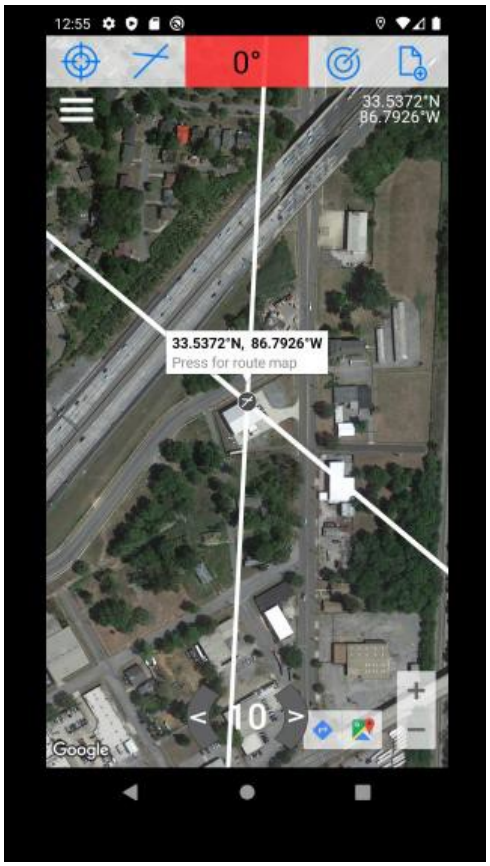


Figure 7: SigTrax Bearing Tool

Sachse Amateur Radio Association
Meeting Minutes
October 8, 2020

Start time: 7:30 pm

Location: Via Google Meet

Facilitator: Greg Kent (KK6AXF) President

Pledge was led by **Greg Kent (KK6AXF)**

Opening

Greg Kent (KK6AXF) President

Everyone introduced themselves and gave their call sign

Johnnie Young (KG5CQO)

Listed each attendee as they introduced themselves

Attendees

11 members

1 guest

Sachse Amateur Radio Association
Meeting Minutes
October 8, 2020

President's report – Greg Kent (KK6AXF)

Next board meeting is Oct 22nd location TBA

Next general meeting is Nov 12th, 7:30 pm

Very possible in person with social distancing

Watch e-mail, newsletter, and Facebook for more info

Possibly North Point Church

Vice-President – John Smyder (W5JWS)

Need ideas for social distancing

Winter Field Day	Jan 30/31
Mentor Fest	Apr 24
Ham Com	June 17 – 19
Summer Field Day	June 26/27
Weekly Fox Hunt Sachse	being evaluated
Ham Radio in the Park	being evaluated

Other Ideas??

Sachse Amateur Radio Association
Meeting Minutes
October 8, 2020

Secretary – Johnnie Young (KG5CQO)

Minutes for the September meeting are posted on the web site,

and were published in the newsletter

The club minutes are always available for your review.

Motion to accept – **Greg Kent (KK6AXF)**

2nd to accept motion – **David Mandala (KG5WFS**

No one opposed

Motion approved

Treasurer – David Mandala (KG5WFS)

Financial sheet for October updated to October 8th

Review of finances were presented

Motion to accept – **John Smyder (KC6TVF)**

2nd to accept motion – **Linda Smyder (K5LCS)**

No one opposed

Motion approved

Current member count for 2020-2021

(as of 9-10-2020): 30 & 1 Honorary

Club members in ARRL: 19 (63%)

Public Information Officer – John Briggs (KC6TVF)

Not in attendance

John Smyder (W5JWS) presented the info

Saturday – QSO breakfast @ Woodbridge Cafe @ 8:00

In person on hold

Café is open but no large groups

Next VE Session – October 10th, Wylie Masonic Lodge

Need volunteers for NCS repeater

October 14th **Steve Harbin – W5SOT**

October 21st **Johnnie Young – KG5CQO**

October 28th **John Smyder – W5JWS**

November 4th **Linda Smyder – K5LCS**

November 11th **Greg Kent – KK6AXF**

Newsletter editor – Steve Harbin (W5SOT)

News letter was sent via e-mail and is on the SARA web site

Distribution #117

Submissions due by the 1st day of the month

Goal—to have the newsletter out a week prior to the general meeting

Always can use news articles and ideas

Projects you are working on or have completed

Events and activities related to Ham Radio

Articles you have read in other publications

Take pictures at all events & send to the Newsletter editor **Steve Harbin (W5SOT)** at newslettereditor@sachseradio.org

The newsletters are really good when members send in articles

Remember the newsletter goes beyond the membership

Director-at-Large – Mark Mantooth (KI5CYA)

Not in attendance

Nothing to report

Education Report – John Smyder (W5JWS)

Please help with subject matter

Upcoming General Meeting Subject Plans

Nov – Coordinated fox hunt – **Mike McCafferty – N5MM**

Dec – Christmas Party – possible pop luck at the church

Can social distance by families

Rusty Cain – KG5WFM

Shared an article in the October 2019 issue of QST about a Raspberry Pi with a Hat for APRS. He had some cards to give away

Greg Kent – KK6AXF presented a motion to the club members to consider an Honorary Membership for 2020 – 2021 for **Scott Whitfield -- KE5AYC** for his contribution to Sachse and the Sachse Club; especially in the area of Weather training, information, alerts, and observations during weather events

Discussion followed:

Johnnie Young -- KG5CQO amended **Greg Kent's -- KK6AXF** motion by deleting the limit of the year 2020 – 2021

The amended motion;

To consider an Honorary Membership for ***Scott Whitfield – KE5AYC*** *for his contribution to Sachse and the Sachse Club; especially in the area of Weather training, information, alerts and observations during weather events*

Greg Kent -- KK6AXF agreed with the amended motion

Linda Smyder -- K5LCS 2nd the motion

No one opposed

Motion approved

Certificate for **Scott Whitfield -- KE5AYC** was requested and will be printed

Sachse Amateur Radio Association
Meeting Minutes
October 8, 2020

The Board of Directors proposed to the club members the addition of a new type of membership to be added to the Sachse Amateur Radio Association By-laws

Presented by **Johnnie Young – KG5CQO**

The board wants to honor the two founding members of the Sachse Amateur Radio Association for establishing said Club and developing the club's By-laws and procedures and for completing all the necessary forms required to establish this club.

This proposal requires modifications in the following sections of the By-laws;

2.03

(addition of);

f. Founder Member. Awarded to the two founders, in recognition for the establishment of this club for the purposes stated herein.

2.07

(addition of);

Founder members shall have the right to vote on all matters brought before the membership

2.08

(addition of);

Founder Members are not required to pay any dues for life

Wayne Lussmyer -- N5LDD requested the addition of the names of the two founders

The amended motion;

2.03

(addition with inclusion of founder names)

Founder Member. *Awarded to the two founders* ***[Jeff Locke (N5LOC) & John Findley (W5INF)]*** *in recognition for the establishment of this club for the purposes stated herein.*

2.07 & 2.08 remain the same as presented in the proposal presented at this meeting (October 8, 2020)

The Board of Directors agreed with the amended motion

John Smyder – W5JWS

2nd **Wayne Lussmyer – N5LDD**

No one opposed

Motion approved

Certificated for **Jeff Lock – N5LOC & John Findley – W5INF**

will be printed

Guest Speaker

Katherine Forson – KT5KMG

Section Youth Coordinator,

Assistant Section Manager

Youth in Amateur Radio

How do clubs get youth interested in Ham Radio?

What can youth do after they have a license?

They can do public service. Schools require service hours and this can be accomplished with a ham radio license. Interestingly they can talk to the astronauts, make a Science Fair project about an aspect of ham radio. They can take part in events for youth such as Robotics, Co-Co Best). They can also apply for a scholarship through the ARRL web site; (www.arrl.org/scholarship-program)

Clubs can advertise, use a public outdoor location, set up a GOTO station. Present educational and fun activities including digital and CW modes or doing fox hunts.

Katherine's presentation was very informative and helpful to the Club. We appreciate her time and effort preparing this Presentation.

Thank you, Katherine for sharing with the Sachse Club.

Adjourn;

Motion – **John Smyder – W5JWS**

2nd – **Club members**

All agreed

Adjourned 8:47 PM

Sachse Amateur Radio Association Weekly Repeater Net Script

Version: 6.2 - August 21, 2020

Good evening and welcome to the "*Ham Radio in Sachse*" Weekly Information Net. My name is (*name, call sign*), and I will be your net control this evening. (***pause)*** This net is heard every Wednesday evening at 8:00pm on the N5LOC repeater, on frequency 145.250, using a PL tone of 141.3. All licensed amateurs are invited and encouraged to participate, whether you are a club member or guest. (***pause)***. This is a Directed Net. Please do not transmit unless directed to do so by Net Control. If the net should go down, everyone should switch to simplex frequency 146.400, with no PL tone or offset. Also, if at any time, you have an emergency to report, break in by saying "Priority" or "Emergency" followed by your call sign and the net will stand by. An emergency is defined as the imminent threat to life or property. **Is there any emergency, priority or time sensitive traffic at this time?** ***Pause***

Check-Ins:
We will begin by taking check-ins, three at a time. If you would like to check into this net, please give your call sign phonetically, your name and repeat your Call Sign alphanumerically slowly, so Net Control can write it down. I will take three check-ins now.
(*write down and read back call signs of check ins*

Club Announcements: ***Now is a good time for Net Control to ID.***
Our first topic will be announcements from club officers. Any club officer on the net with an announcement, please give your call sign now.

Member & General Comments: ***Now is a good time for Net Control to ID.***
Our next topic is member & general comments. Any member of the Sachse Amateur Radio Association, or anyone else on this net, who would like to make a comment, please give your call sign now.

Tech Talk: ***Now is a good time for Net Control to ID.***
Now it is time for Tech Talk. You might ask any questions you have of a technical nature regarding amateur radio or computers. You might share any information or comments that you think would be valuable for the group. If anyone has an item for Tech Talk, please give your call sign now.

Swap Shop: ***Now is a good time for Net Control to ID.***
The next topic is Swap Shop. Anyone wishing to buy, sell, trade, or give away items related to ham radio or computers is invited to do so. Please do not haggle over price on the air. If anyone has an item for Swap Shop, please give your call sign now.

Education: ***Now is a good time for Net Control to ID.***
Now we would like to know if anyone has an idea for an Education Presentation. Anyone who wants to suggest an item for a future presentation, or who has a presentation to share this evening, please give your call sign now.

How Was Your HAM Week: ***Now is a good time for Net Control to ID.***
Now for the fun part of our hobby, "***How Was Your HAM Week***". This exercise allows any station to share anything related to HAM Radio. Example topics can be "DX'ing Observations", "Experiences", "Challenges", "Lesson-Learn with your equipment", "Victories on a project" or even something you have learned from a "not so successful project". Whether you are a member or guest, this exercise is voluntary. No station is under obligation to share anything. As your Net Control, I will start by briefly sharing my "Ham Week". (Share something you recently did.) If any station would like to share their "Ham Week", simply give your Call Sign and Net Control will recognize your station and give you the platform to share. (*Net Control – provide positive feedback on their topic.)*

Late Check-Ins: ***Now is a good time for Net Control to ID.***
Before we end this Net, I would like to take late check-ins. If there are any late check-ins, whether RF or Echo Link, please give your call sign and name slowly and clearly. (*write down and read back each call sign*).

Last Call:
This is now the last call for any station that might have any comments? Please give your call sign.

Wrap-Up: ***Now is a good time for Net Control to ID.***
This concludes the "Ham Radio in Sachse" Weekly Information Net. If you would like more information about the Sachse Amateur Radio Association, please visit our web site at www.sachseradio.org. This is (*call sign*) and we now return the N5LOC repeater to its normal use.

Sachse Amateur Radio Association Simplex Net Script

Version: 6.2 - April 25, 2020

Good evening and welcome to the "*Ham Radio in Sachse*" Simplex Net. My name is (*name, call sign*), and I will be your net control this evening. This net is heard every 3rd Tuesday evening at 7:30 pm on a frequency of 146.40 Simplex. Therefore, there is no need for an offset or PL tone. All licensed amateurs are invited and encouraged to participate, whether you are a club member or guest. This is a Directed Net. Please do not transmit unless directed to do so by Net Control. At the end of check-ins, I will ask for relays of check-ins I acknowledged, that you did not hear, and check-ins that I did not hear. Near the end of the program, I will ask for a signal report. If at any time, you have an emergency to report, break in by saying "Priority" or "Emergency" followed by your call sign and the net will stand by. An emergency is defined as the imminent threat to life or property. **Is there any emergency, priority or time sensitive traffic at this time?** ***Pause—***
hearing none...

Check-Ins:
We will begin by taking check-ins, three at a time. If you would like to check into this net, please give your call sign phonetically, your name and repeat your call sign alphanumerically, so Net Control can write it down. Please come now in groups of 3.
(*write down and read back call signs of check ins*).
When there are no more check-ins, go through the list and ask if anyone heard a check-in that you did not acknowledge or if there is a check-in that they did not hear.
You may have to pick a relay person for the night.
If you had to pick a relay person or persons, then remember to stop after each conversation and have the relay person pass that information on.

Club Announcements: ***Now is a good time for Net Control to ID.***
Our first topic will be announcements from club officers. Any club officer on the net with an announcement, please give your call sign now.

Member & General Comments: ***Now is a good time for Net Control to ID.***
Our next topic is member & general comments. Any member of the Sachse Amateur Radio Association, or anyone else on this net, who would like to make a comment, please give your call sign now.

Tech Talk: ***Now is a good time for Net Control to ID.***
The next topic is Tech Talk. Ask any questions you may have of a technical nature regarding amateur radio or computers. Feel free to share any information or share any comments that you find to be valuable with the group. If anyone has an item for Tech Talk, please give your call sign now.

Education: ***Now is a good time for Net Control to ID.***
Our next topic is Education. Anyone who has an education presentation they would like to make or want to suggest an item for a future presentation, please give your call sign now.

Signal Reports: ***Now is a good time for Net Control to ID.***
Next, we will discuss signal reports. How does net control and/or the check-ins come across. I will now go down the list of check-ins so everyone can give a response. Please use the plain language radio checks provided on the Sachse Radio web page. (For example; net control was loud and clear.) Also please include you r power levels at the end of your signal report.
(You start)

Late Check-Ins: ***Now is a good time for Net Control to ID.***
Next, Net Control would like to take late check-ins. If there are any late check-ins, please give your call sign and name slowly and clearly.
(*write down and read back each call sign*).
Remember to ask if there are any check-ins you did not acknowledge or check-ins that others did not hear.

Last Call:
Before we conclude the net, are there any Stations wishing to report into the Net and/or have any comments?

Wrap-Up: ***Now is a good time for Net Control to ID.***
This concludes the "Ham Radio in Sachse" Simplex Net. If you would like more information about the Sachse Amateur Radio Association, please visit our web site at www.sachseradio.org. This is XXXXXXX and we will now return this frequency to its normal use.

Sachse Amateur Radio Association
Sachse, Texas 75048-3696
www.sachseradio.org
kf5nbo@gmail.com

Date: _____

Type of Application: New Member ☐ **or Renewal** ☐

Your Call Sign:_____ **Your License Class:**_____

Your Name:_____ **Spouses Name:**_____

Address:_____

City:_____ **State:**_____ **Zip:**_____

Home Phone:_____ **Work Phone:**_____

Cell Phone:_____ **Email:**_____

Membership Types: Please check only one option below:

☐ **Regular:** A regular member shall be any FCC licensed amateur radio operator who does not fall under the special provision of an associate or student membership. Regular member dues are $25.00 per year unless prorated (see below).

☐ **Family:** A family membership shall be any FCC licensed amateur radio operators and non-licensed family members interested in amateur radio who live in the immediate household. Family member dues are $30.00 per year unless

☐ **Associate:** An associate member shall be any person maintaining membership to support the association but who does not hold a license as a radio amateur. Associate member dues are $10.00 per year and are not prorated.

☐ **Student:** A student member shall be any FCC licensed amateur radio operator who is currently enrolled as a full-time student, is 18 years of age or younger, and is not otherwise eligible to be included in a family membership. Student member dues are $10.00 per year and are not prorated.

If selecting Family membership, please list the family members covered by this application.

Name:_____ **Email:**_____ **Call Sign (if any):**_____ **Lic Class:**_____

Name:_____ **Email:**_____ **Call Sign (if any):**_____ **Lic Class:**_____

Membership Dues: (Please check only one)

Dues are initially paid upon joining the association. Renewal dues are paid no later than the September meeting each year. A new application must be submitted each year as well. Dues are reduced (prorated) for Regular and Family members (only) who join or renew their membership after Dec 31st:

- ☐ Joining Sep 1 thru Dec 31, pay $25.00 for Regular dues, or $30.00 for Family dues.
- ☐ Joining Jan 1 thru Mar 31, pay $18.75 for Regular dues, or $22.50 for Family dues.
- ☐ Joining Apr 1 thru Jun 30, pay $12.50 for Regular dues, or $15.00 for Family dues.
- ☐ Joining Jul 1 thru Aug 31, pay $6.25 for Regular dues, or $7.50 for Family dues.

TOTAL DUE: $_____

Are you a current member of the ARRL? YES ☐ or NO ☐ (please choose only one).

By submitting this application, either by hand or any electronic means, you hereby agree to abide by the rules and regulations of the Sachse Amateur Radio Association.

Signature: _____